

1762<sup>#</sup>2

272-CIP  
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Thomas H. Baum, et al.

Group Art Unit: 1762

U.S. Application No.: 09/874,102

Examiner: TBA

Filed: June 5, 2001

Title: PLASMA-ASSISTED DRY ETCHING OF NOBLE METAL-BASED MATERIALS

CERTIFICATE OF MAILING	
Date of Deposit: September 10, 2001	
I hereby certify that this Information Disclosure Statement is being deposited with the United States Postal, Postage Prepaid to Addressee" service under 37 CFR 1.8 on the date indicated above and is addressed Assistant Commissioner for Patents, Washington, DC 20231.	
Lee Ann DiLello	
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INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required in accordance with 37 CFR § 1.56 and § 1.97(b).
- ☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.

- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was the first citation of such item by a foreign patent office in a counterpart foreign application, which occurred no more than three months prior to filing the Information Disclosure Statement. 37 C.F.R. §1.97(e)(1).
- ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(2).
- ☐ c. Attached is our check no. \_\_\_\_ in the amount of \$240 in payment of the fee under 37 C.F.R. §1.17(p). Please credit or debit Deposit Account No. 50-0860 as needed to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
- ☐ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Applicant(s) hereby petition(s) that the Information Disclosure Statement be considered. Attached is our check no. \_\_\_\_ in the amount of \$130.00 in payment of the petition fee under 37 C.F.R. §1.17(i)(1). Please credit or debit Deposit Account No. \_\_\_\_ as needed to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
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- ☐ 4. (other):

Applicant does not believe that any additional fee is due in connection with the foregoing. However, any deficiencies may be charged to the deposit account 50-0860.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. McLauchlan, III', with a long horizontal flourish extending to the right.

Robert A. McLauchlan, III  
Registration No. 44,924  
Attorney for Applicant

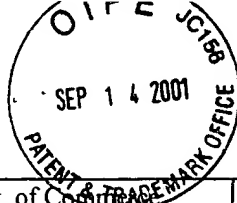
Date: September 10, 2001  
Advanced Technology Materials, Inc.  
7 Commerce Drive  
Danbury, CT 06810  
Attorney Ref: 272-CIP

FORM PTO-1449 US Dept. of Commerce Patent and Trademark Office		ATTORNEY DOCKET NO. ATMI-272-CIP		SERIAL NO. 09/874,102			
INFORMATION DISCLOSURE STATEMENT (use several sheets if necessary)		APPLICANT Peter C. Van Buskirk, et al.					
		FILING DATE June 5, 2001		GROUP 1762			
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	08/975,366		Van Buskirk and Kirlin			11/20/98
	AB	6,018,065	1/2/00	Baum, et al.			
	AC	5,911,887	6/15/99	Smith, et al.			
	AD	5,814,238	9/29/98	Ashby, et al.			
	AE	4,659,426	4/21/87	Fuller, et al.			
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
<b>OTHER DOCUMENTS (Including Author, Title, Journal-Date, Page Number, Etc.)</b>							
	AF	Koteki, D.E., "A Review of High Dielectric Materials for DRAM Capacitors", <i>Integ. Ferro.</i> , 1997, Vol. 16, pp. 1-19.					
	AG	Jeon, et al., "Thermal Stability of Ir/Polycrystalline-Si Structure for Bottom Electrode of Integrated Ferroelectric Capacitors", <i>Appl. Physics Lett.</i> , 1997, Vol. 71(4), pp. 467-469.					
	AH	Williams, et al., "Etch Rates for Micromachining Processing", <i>Journ. For Microelectromechanical Systems</i> , December 1996, Vol. 5 (4), pp. 256-269					
	AI	Vugts, et al., "Si/XeF <sub>2</sub> Etching-Temperature Dependence", 1996, <i>J. Vac. Sci. Tech. A</i> , Vol. 14(5), pp. 2766-2774					
	AJ	P.C. Fazan, et al., "Stacked Capacitor Modules for 64 Mb DRAMs and Beyond", <i>Semiconductor Inter.</i> , 1992, Vol. 108, pp. 108-112					
	AK	L. H. Parker, et al., "Ferroelectric Materials for 64Mb and 256Mb DRAMs", <i>IEEE Circuits and Devices Mag.</i> , Jan. 1990, pp. 17-26					
Continue on Page 2							
EXAMINER					DATE CONSIDERED		
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.							

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		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
OTHER DOCUMENTS (Including Author, Title, Journal-Date, Page Number, Etc.)							
	CA	Ebsworth, E.A.V., et al., "Formation of Iridium Fluoroacyl Complexes by Reaction of Iridium Carbonyls with Xenon Difluoride and Reactions of these to Generate Unusual Acyl Complexes", <i>J. Chem. Soc., Dalton Trans.</i> , 1993, ISS. 7, pp. 1031-7					
	CB	Blake, A.J., et al., "Novel Reaction of an Iridium Carbonyl Complex with Xenon Difluoride: The First Metal Fluoroacyl Complex", <i>J. Chem. Soc., Chem. Commun.</i> , 1988, ISS.8, pp. 529-530					
	CC	Sladkey, F.O., et al., "Xenon Difluoride as a Fluoride Ion Donor" <i>J. Chem. Soc. A</i> , 1969, Vol. 14, pp. 2179-88					
	CD	Floy I. Chang, et al., Gas-Phase Silicon Micromachining with Xenon Difluoride, <i>Proc. Of SPIE</i> vol. 2641, pp. 117-128.					
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EXAMINER					DATE CONSIDERED		
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